



Date: August 15, 2016

To: Thomas J. Bonfield, City Manager

Through: W. Bowman Ferguson, Deputy City Manager

From: Steven W. Hicks, Director, General Services Department

Subject: Downtown Parking Garage Project Environmental, Geotechnical, Special Inspections and Construction Material Testing Contract with Falcon Engineering, Inc

Executive Summary

In March of 2016 a Request for Qualifications (RFQ) was advertised for Engineering Services for Environmental, Geotechnical, Special Inspections and Construction Materials Testing for the new Downtown Parking Garage Project. The proposed location of the new garage is at the site of the existing City surface lot #14 along West Morgan Street between Rigsbee Avenue and North Mangum Street. Written submittals were received April 21, 2016. Firms were shortlisted and interviewed on June 22, 2016 and from that process Falcon Engineering was determined to be the top ranked firm. Contract and fee negotiations have been ongoing since. This agenda item requests City Council approval for professional engineering services with Falcon Engineering, Inc (Falcon) for Environmental, Geotechnical, Special Inspections and Construction Materials Testing for the new Downtown Parking Garage Project.

Recommendation

The Department of General Services recommends that the City Council:

1. Authorize the City Manager to execute a professional engineering services contract with Falcon Engineering, Inc for an amount not to exceed \$312,000;
2. Establish a design contingency in the amount of \$31,200; and,
3. Authorize the City Manager to negotiate and execute amendments to the Professional Engineering Services Agreement for the Downtown Parking Garage project with Falcon provided the total cost does not exceed \$343,200

Background

Geotechnical Services for the proposed Downtown Parking Garage project will be an integral component of the design process. There will be a close collaboration of this service with the design team to help inform design decisions from the earliest stage in order to develop a thorough, appropriate and cost effective subsurface investigation program. Recognizing potential risks, access issues and schedule requirements at the inception of the project will

allow the Geotechnical team to devise the appropriate testing program that will serve the project team and aid with schedule and budget efficiencies.

Materials testing and inspections will be another critical component and sound documentation and daily observation along with field and laboratory reports will ensure a high quality and technically sound finished product.

The critical services provided in this contract include:

Environmental Site Services

The City has completed a Phase I Environmental Site Assessment (ESA) through a Brownfield Assessment Program in cooperation with the OEWD office and determined the site may have been impacted by historical on-site and/or off-site operations (Former Filling Stations/Dry Cleaners). A Phase II ESA is in the queue for August 2016 through the same program to determine if there are any contaminated materials (Soils/Water). Depending on the findings of a Phase II ESA, Phase III Environmental Services may be necessary to make recommendations for and to remediate the presence of hazardous or contaminated materials in soils and groundwater.

Geotechnical Investigations

Geotechnical investigations to include preliminary field testing, laboratory analysis of soils and rock, and engineering recommendations for the site development and foundations design of the structures.

Special Inspections

Special inspections on all structural elements as specified in Chapter 17 of the latest version of National Building Code duly modified by the State of North Carolina. These elements could include: Erosion Control, Foundations, Retaining walls, Concrete slabs, any light weight concrete, Pre-stressed or post-tensioned concrete, Precast concrete, Masonry work, Steel structures and steel connections, Welding Inspections, Water Proofing of Foundation walls, Roofing, Fire proofing, reinforcement steel, Form work and mechanical connections inspections and documentation.

Construction Engineering Inspections and Material Testing

Construction engineering and inspections of all construction activities including erosion control measures, drainage systems, proof roll inspections, retaining walls, footing base bearing capacity, Construction materials testing for soils, rock, ABC stone, concrete, asphalt, masonry blocks, grout and mortar, welds on steel structures, asphalt pavements, soil backfill density testing, spray on fire retardants during the construction process.

Overview of the RFQ Process

Request for Qualifications (RFQs) for Design Services were advertised on March 31, 2016. Proposals were received from respondent firms on April 22, 2016. Upon receipt, City staff forwarded the proposals to the Equal Opportunity and Equity Assurance (EOEA) Department for compliance determination with the City's Equal Business Opportunity Program Ordinance. Eleven Engineering Services proposals were deemed compliant and were distributed to members of the interdepartmental review team for evaluation. Members of the evaluation committee independently reviewed and scored the proposals based on criteria outlined in the RFQs for Engineering Services.

The evaluation team's individual scoring sheets were compiled by General Services. The team met to discuss the cumulative RFQs and scoring results and a "shortlist" was developed of the respondent firms. Finalist interviews for the Engineering Services firms were held on June 22, 2016. The interview panel included: Angela Henderson (EO/EA Specialist); Marilee Martin (GSD-PM Senior Construction Project Manager); Henri Prosperi (GSD-PM Team Leader/Project PM); Matt Sumpter, PE (Kimley-Horn Structural Engineer); and Jeff Beam (Balfour Beatty Construction). Scoring results and averaging from interviews are as follows:

Ranking for Engineering Firms

1. Falcon Engineering
2. S&ME
3. Froehling & Robertson, Inc
4. amec foster wheeler
5. Kleinfelder

Staff notified the firms of the ranking results and that Staff was proceeding with fee negotiations with the top ranked firm. Firms were notified that should negotiations be unsuccessful, Staff would move to the number 2 ranked firm. Thereafter, Staff received draft fee proposals from Falcon Engineering, a Raleigh based firm. Multiple meetings and negotiations regarding fee, scope of services and contract terms has been ongoing, as well as other pre- contract meetings and planning.

Issues/Analysis

As described above, negotiations with Falcon has resulted in a fee for engineering services in an amount not to exceed \$312,000. Cost savings may be realized as the structural system and foundation design are finalized. Falcon's services include Geotechnical and Environmental Engineering, as well as Construction Material Testing and Special Inspections. Environmental services at this time are limited and may be expanded pending the results of the Phase II ESA. Geotechnical Services are based on deep foundations, but subsurface conditions may warrant deeper or additional borings and services would be expanded accordingly. The attached engineering contract describes the routine contractual requirements.

The Downtown Parking Garage project will require close coordination by and between the Project team, Transportation and other City departments, and community stakeholders. The integrated project approach of contracting for concurrent architectural, engineering and CMAR preconstruction services presents an opportunity to develop and deliver a project that achieves the goals of the end users and City-wide community.

Alternatives

Proceeding with execution of engineering services contract is recommended as the only viable alternative for consideration.

Financial Impacts

Revenue	4800C002/CC402				
Transportation Enterprise Fund					\$ 23,000,000.00
Expenditures	4800C002/CC402				Object Code
Professional Services-Design Team				\$ 1,854,080.00	731003
Professional Services-Geotechnical Engineer				\$ 312,000.00	731003
Professional Services-CMAR Precon				\$ 115,000.00	731003
Parking Equipment				\$ 500,000.00	
Owners Costs-Design and Construction Contingencies				\$ 1,718,920.00	
Construction Budget-GMP				<u>\$ 18,500,000.00</u>	
					\$ 23,000,000.00

UBE REQUIREMENTS

No MUBE or WUBE goals were set.

Falcon Engineering, Inc. is a certified DBE WBE firm.

WORKFORCE STATISTICS

Workforce statistics for Falcon Engineering, Inc. are as follows:

Total Workforce	31	
Total Females	8	(26%)
Total Males	23	(74%)
Black Males	0	(0%)
White Males	22	(71%)
Other Males	1	(3%)
Black Females	0	(0%)
White Females	8	(26%)
Other Females	0	(0%)